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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/587,888 | 06/06/2000 | Austen John Britton | 190-1453 | 8111 |

7590 01/15/2004

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| EXAMINER |
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GROSS, KENNETH A

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| ART UNIT | PAPER NUMBER |
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2122

DATE MAILED: 01/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,888

Applicant(s)

BRITTON ET AL.

Examiner

Kenneth A Gross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,8,13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,8,13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on October 30th, 2003.
2. Claims 1, 7, 8, 13, and 16 remain rejected under U.S.C. 103(a). Claim 2 is hereby cancelled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7, 13, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Rosensteel et al. (U.S. Patent Number 6,167,405) in view of Coker (U.S. Patent Number 5,640,550).

In regard to Claim 1, Rosensteel teaches defining a multi-dimensional data warehouse and source databases as a set of entity-relationship data models (Figure 1c, item 12-4 and Column 5, lines 18-27). Rosensteel teaches creating a sequence of SQL statements, which are instructions for loading the multi-dimensional data warehouse from the plurality of source databases (Column 1, lines 58-67 and Column 2, lines 1-5). These statements are obviously stored in a file. Rosensteel does not teach that the source file contains a plurality of directives, nor does he teach pre-processing the source file by replacing the directives with code, using information pulled from the data models, to generate a destination file containing the code for loading the multi-dimensional data warehouse from a plurality of source databases. Coker,

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however, does teach automatically (Column 7, lines 11-14) processing COBOL instructions by converting to the instructions to SQL code (Column 28, lines 26-35), where the code is generated based on information pulled from the database (Column 4, lines 58-63). Since these instructions are passed through a compiler, Coker also teaches generating an executable destination file for loading a data warehouse (Column 28, lines 37-38). Therefore, it would have been obvious to one of ordinary skill in the art at the invention to define a multi-dimensional data warehouse and source databases as a set of entity-relationship data models, create a sequence of SQL statements, which are instructions for loading the multi-dimensional data warehouse from the plurality of source databases, as taught by Rosensteel, where the instructions are automatically converted into SQL code in the form of an executable where the code is generated based on information pulled from the database, as taught by Coker, since this allows the user to write source code statements for a database without knowing the details of the database.

Claims 7, 13, and 16 are method, system, and information carrier claims that correspond with Claim 1, and are rejected for the same reasons as Claim 1, where Rosensteel teaches a system and information carrier for carrying out said method of Claims 1 and 7 (Figure 1a).

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosensteel et al. (U.S. Patent Number 6,167,405) in view of Coker (U.S. Patent Number 5,640,550) and further in view of Access 97 Macro & VBA Handbook by Susann Novalis, 1997 (hereinafter Novalis) and Backes et al. (U.S. Patent Number 5,231,693).

In regard to Claim 8, Rosensteel and Coker teach the method of Claim 7, but does not teach that said step of creating the source file includes inserting at least one run-time processor macro into the source file, and wherein said step of running the code includes replacing the

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macro with executable code generated. Novalis, however, teaches that VBA programming in Microsoft Access 97 allows for macros to be inserted in source code, where macro substitutions are performed on the source code (Chapter 5, page 1, lines 1 and lines 9-10). Macro substitutions inherently involve replacing the macro with code during the compilation process, and hence executable code is put in place of the macro when the code is finished compiling. Novalis does not teach that these macros are run-time processor macros. Backes, however, does teach binding of macros, where the macros are processed at run-time (Column 9, lines 53-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of Claim 7, where the step of creating the source file includes inserting at least one macro into the source file, and wherein said step of running the code includes replacing the macro with executable code generated, as taught by Novalis, since macros reduce often repeated software statements into a name that can be easily placed in the source code, and the macro substitutions comprise inserting a run-time processor macro for processing at run time, as taught by Backes, since this allows macros to be processed when information needed to process the macros is available.

Response to Arguments

4. Applicant's arguments filed October 30th, 2003 have been fully considered but they are not persuasive.

The applicant argues that Rosensteel does not teach creating a source file containing a plurality of directives and then automatically pre-processing the source file by replacing the directives with code, to generate an executable destination file (Page 6, lines 26-30). However,

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the support for directives comes from Coker, who treats source instructions as if they are directives, by replacing a line of code with a sequence of SQL instructions (Column 28, lines 26-35). According to Webopedia, a directive is simply an instruction to perform a certain task on a computer. Therefore, the instructions in Rosensteel can be considered directives.

The applicant further argues that there is no suggestion in Coker of replacing the COBOL statements with SQL statements to generate an executable destination file (Page 7, lines 8-13). However, Coker does use the term 'convert' to describe what happens to the COBOL instructions. This term does imply that the instructions are changed and thus replaced by the new SQL instructions. Furthermore, Coker does teach generating an executable (Column 28, lines 37-38), and since the source COBOL program is compiling, the compiler is inherently generating an executable of the source program.

Finally, the applicant argues that it would not have been obvious to combine the teachings of Rosensteel and Coker, because Rosensteel is concerned with creating and populating a data warehouse, whereas Coker is concerned with allowing a COBOL program to access and use data from an existing SQL database. However, both references are concerned with the generation of SQL code. The motivation for combination lies in the lack of replacing directives with code using information pulled from the database in a source code in Rosensteel, whereas Coker teaches such a source code with these directives and replacement method.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

“Command” by Webopedia.com, September 1996.

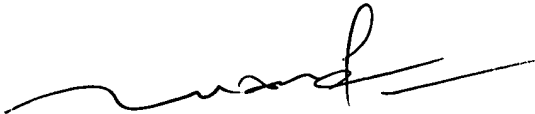
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG



TUAN DAM
SUPERVISORY PATENT EXAMINER